

The following review was recently published in *Myrmecia*, the newsletter of the Australian Entomological Society, Vol. 39(3):5-6, July 2003.

Coleoptera: Buprestoidea. Zoological Catalogue of Australia. Volume 29.5. C.L. Bellamy, CSIRO Publishing Australia, Melbourne. 2002. xii 492 pp. + 4 colour plates. \$AUS 140.

A broad appreciation of the Australian members of the superfamily Buprestoidea, commonly known as 'jewel beetles' is clouded by the large number of synonyms, the wealth of new species described and higher taxa applied since H.J. Carter's 1929 checklist, and the number of unpublished 'cabinet' names that confuse the current state of the speciose genus *Melobasis*. A definitive modern catalogue of the Australian fauna is long overdue. Charles Bellamy's volume fills this role admirably and is a required addition to the libraries of all Coleopterists. However, the author stresses that the taxonomic histories of several Australian buprestid genera have been so 'tortuous' that a number of the *Catalogue* listings are likely to change whenever future revisions are completed. Those Coleopterists raised on a diet of flower-frequenting Buprestidae will note that this volume highlights the great diversity of Australian species and genera not associated with flowers. Many of these beetles are minute denizens of rainforest, saltmarsh and the semi arid zones, their often fortuitous collection demanding long hours of beating foliage or rearing from timber billets.

The Buprestoidea volume departs from the black and white line drawings normally used in the series to characterise individual higher taxa. Here, depiction is achieved by 4 colour plates featuring 26 superb illustrations by André Olwage. These are best appreciated in full or bright light. The Introduction outlines the evolution of the higher classification of the superfamily and draws attention to those genera most in need of revision. There is a table summarising the higher taxonomic ranks that contain Australian species, a review of publications dealing with local distribution, buprestid fossils, biology and immature stages, and a discussion of the extracontinental relationships of the Australian fauna. The development of subfamily, tribe and subtribe classifications is discussed, the discussion clearly indicating that the status of several higher rankings remains in a state of flux and contention. Conveniently, references are listed at the end of each suprageneric category. As in Volume 27.3B (Pentatomomorpha) reviewed above abbreviations, symbols and museum acronyms used in the text are given in appendices at the rear of the volume.

This volume continues the established series format of briefly indicating the distribution of species, genera and higher taxa, and citing known ecological data with each species. The author has been meticulous in including the publications of co-workers and colleagues. Considerable detail is given in the listing of host data, but indications of habitat associations are not generally mentioned; though these are known for many species. In some cases habitat associations can be inferred, with caution, from the host plant records cited for individual buprestid taxa.

There are some changes in nomenclature made in the Buprestoidea catalogue, and these will require a review of labelled institutional holdings and databases. As examples, the genera *Curis* and *Alcinous*, respectively become *Selagis* and *Aaaba*. Volume 29.5 also gives highlight to generic changes not yet generally surfacing in the named series held by modern collections (e.g., species now in *Chalcophorotaenia*, *Ethonion*, *Calotemognatha*, and *Temognatha*). Known records of introduced foreign species (e.g., *Cypriacus aurulenta*) are also included in the treatment of the Buprestoidea. This volume is also important in bringing to a greater awareness the modern published contributions of, for example, Curletti (on Australian *Agrilus*), Volkovitsh and Hawkeswood (immature life stages, host associations), Holynski, Cobos, Bily and Kolibac (higher classification), Barker (on *Astraeus*, *Castiarina* and *Cisseis*), the late Gordon and Joy Burns (regional databases), Peterson (taxonomy and biology generally) and, not least of all, the prodigious writings of Charles Bellamy himself. Important titles by some of these workers have appeared in foreign journals not readily accessible or known and, as a consequence, may have been overlooked by Australian Coleopterists.

Bellamy remarks that many synonymies remain to be explored and that the listing and validity of some names, such as those placed in the *Anilarina*, may be doubtful but are beyond the scope of this volume to confront. The status of many names within *Anilara*, and *Melobasis*, may plague buprestid workers for years to come.

Irrespective of the confusion overshadowing the status of some of the names applied to the Australian buprestid fauna, this quintessential volume provides a sound foundation from which future interpretation and revision can proceed.

The editors forewarn the pending end to hard copies of the *Zoological Catalogue of Australia* series. There are benefits to electronic copies, but there is also a practical utility in continuing hard-copy issues. The practical constraints to downloading and printing out such large works are not to be belittled, and the accessibility of computer generated copies is dependent upon electricity and appropriate hardware and software. Taxonomists and systematists are inclined to thumb back and forth through volumes of the *Zoological Catalogue* at all hours, and often for the briefest, yet critical, of moments. Volumes 27.3B and 29.5 are impressively produced works that stand as fine examples of the printed and bound word, against which, I am sure, electronic-only volumes will be found wanting.

References

- Carter, H.J. 1929. A checklist of the Australian Buprestidae. With tables and keys to subfamilies, tribes and genera (by A. Thery). *Australian Zoologist* 5, 265-304.
Specht, R.L. 1970. Vegetation. Pp. 44-67. In Leeper, G.W. (ed.) *The Australian Environment*. 4th edn Melbourne: CSIRO-Melbourne Univ. Press.

Geoff WILLIAMS,
Research Associate, Australian Museum,
Sydney. NSW 2000 Australia.